

2005

**Virginia Department of Transportation
Daily Traffic Volume Estimates
Including Vehicle Classification Estimates**

where available

Special Locality Report

109

City of Emporia

Prepared By

**Virginia Department of Transportation
Traffic Engineering Division**

In Cooperation With

**U.S. Department of Transportation
Federal Highway Administration**

Virginia Department of Transportation
Traffic Engineering Division
Traffic Monitoring Section

The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along streets and highways and other sources. From these data, estimates of the average number of vehicles that traveled each segment of road are calculated. VDOT periodically publishes booklets listing these estimates.

One of these booklets, titled “Average Daily Traffic Volumes with Vehicle Classification Data, on Interstate, Arterial and Primary Routes” includes a list of each Interstate and Primary highway segment with the estimated Annual Average Daily Traffic (AADT) for that segment. AADT is the total annual traffic estimate divided by the number of days in the year. This booklet also includes information such as estimates of the percentage of the AADT made up by 6 different vehicle types, ranging from cars to double trailer trucks; estimated Annual Average Weekday Traffic (AAWDT), which is the number of vehicles estimated to have traveled the segment of highway during a 24 hour weekday averaged over the year; as well as Peak Hour and Peak Direction factors used by planners to formulate design criteria.

In addition to the Primary and Interstate publication, one hundred books are published periodically, one for each of 100 areas across the state defined by VDOT for record-keeping purposes. These books include traffic volume estimates for roads within the county, cities, and towns within the area. These books are titled “Daily Traffic Volumes Including Vehicle Classification Estimates, where available; Jurisdiction Report numbers 00 through 99”.

Also available are a number of reports summarizing the average Vehicle Miles Traveled (VMT) in selected jurisdictions and other categories of highways. There are many different ways to present traffic volume summary information. Because the user determines the value of each presentation, the reports have been redesigned based on user requests and feedback. The people of the VDOT Traffic Engineering Division Traffic Monitoring Section who produce these books welcome requests for other helpful ways of presenting the summary information.

A compact disc (CD) is available that includes files in the Adobe® Portable Document Format (PDF) that can be displayed, searched, and printed using common desktop computer equipment. The CD includes the publications described above as well as a number of other reports, including specialized VMT summaries and smaller AADT reports for each city and town separately.

Publication Notes

Parallel Roads

For road inventory and management purposes, some roadways are counted separately by direction and have separately published traffic estimates for each direction of travel. Examples of such roadways are the interstate system and routes with separated facilities and (usually) one-way traffic facilities in urban areas. In these publications, they are referred to as parallel roads. As a convenience for the users of the publication, the listing for segments of roads with parallel segments are published with both the traffic estimates for their own direction of travel (e.g. I-95 Northbound) as well as the estimate of the total of all traffic on the same route including parallel roadways (all directions of I-95). The publication will have a “Combined Traffic Estimates for Parallel Roadways on this Route” or “Combined Traffic” identifiers for the combined direction of travel estimates.

Roadways such as I-395 with a North segment, a South segment and a separate Reversible lane segment will have the estimate for more than two parallel roadways included in the entire combined traffic estimate.

Some routes have very complicated paths through cities and towns. These parallel paths may be too complex to allow a relationship between nearby sections of the opposite direction on the same route. In this case, to indicate that the traffic estimates for such a road segment may not include all directions of traffic on that route, the line that would list the combined values will indicate “NA” for not available.

VDOT’s traffic monitoring program includes more than 100,000 segments of roads and highways ranging from several mile sections of Interstate highways to very short sections of city streets. Due to problems experienced obtaining some traffic count data, and the level of quality necessary to maintain confidence in the data, no estimate is currently available for some segments of roadway. These segments are included in the publications indicating “NA” for not available. It is the intention of the VDOT Traffic Engineering Division Traffic Monitoring group to obtain the data necessary and to report traffic volume estimates on all road segments included in these publications.

Many of the road segments in this program are local secondary roads. The amount and detail of data collected on these roads are not as great as the data collected on higher volume roads. The vehicle classification, average weekday traffic volumes, and the theoretical design hour traffic volumes are not calculated for these roads. The publications indicate “NA” for the information that is not available.

This publication is based on a traffic monitoring program initiated in 1997. Because the data collection techniques and statistical evaluation processes are different than those used in previous years, comparison with previous publications may be misleading.

Glossary of Terms:

Route: The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

Length: Length of the traffic segment in miles.

AADT: Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

4Tire: Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

Bus: Percentage of the traffic volume made up of busses.

2Axle Truck: Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

3+Axle Truck: Percentage of the traffic volume made up of single unit trucks with three or more axles.

1Trail Truck: Percentage of the traffic volume made up of units with a single trailer.

2Trail Truck: Percentage of the traffic volume made up of units with more than one trailer.

QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link

K Factor: The estimate of the portion of the traffic volume traveling during the peak hour or design hour.

QK: Quality of the Peak Hour estimate:

- A Factor based on 30th Highest Hour Observed During at least 250 days of Continuous Traffic Data
- B Factor based on other Hour Observed During Less than 250 days of Continuous Traffic Data
- F Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of design hour
- N Peak Hour Factor of Similar Neighboring Traffic Link
- O Provided by External Source

Dir Factor: The estimate of the portion of the traffic volume traveling in the peak direction during the peak hour..

AAWDT: Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.

QW: Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- M Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source

Year: Year for which the published values are appropriate. If the Quality of AADT (QA) is “R”, the year is the year that the raw traffic count was collected, and if available,

Route Shield Legend

Route Systems

 Interstate Route Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.

 US Route

 Virginia State Route

 Frontage Road (F precedes frontage route number)

 Secondary Route

Special Routes

 Bus - Business Route

Bypass - Bypass Route

Truck - Truck Route

 ALT - Alternate Route

Wye - Wye Route connector

 P - Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.

 The VDOT Maintenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

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Annual Average Daily Traffic Volume Estimates By Section of Route
City of Emporia

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	Truck				QC	K Factor	QK	Dir Factor	AAWDT	QW		
							2Axle	3+Axle	1Trail	2Trail								
58	West Atlantic St	From: City of Emporia (Maint: 40)	0.41	WCL Emporia	14000	F	88%	0%	0%	1%	10%	0%	F	0.069	F	0.53	14000	F
58	West Atlantic St	To: City of Emporia (Maint: 40)	0.21	Purdy Rd	28000	F	88%	0%	0%	1%	10%	0%	F	0.076	F	0.656	27000	F
58		To: I-95	0.84		17000	F	71%	1%	1%	2%	24%	1%	C	0.075	F	0.561	16000	F
58		From: US 301 Main St	0.64		14000	F	65%	1%	1%	3%	29%	1%	C	0.075	F	0.564	14000	F
58		To: Reese St	0.49		17000	F	88%	1%	0%	1%	10%	0%	F	0.072	F	0.511	16000	F
58		From: Davis St	0.65		16000	F	88%	1%	0%	1%	10%	0%	F	0.072	F	0.505	15000	F
58		To: East Atlantic St	0.40		16000	F	88%	1%	0%	1%	10%	0%	F	0.07	F	0.526	15000	F
58		To: ECL Emporia																
Bus		From: US 58 West Intersection																
58		City of Emporia	0.21		11000	F	98%	0%	1%	0%	1%	0%	C	0.086	F	0.541	12000	F
Bus		To: West Atlantic St																
58	West Atlantic Street	From: US 58 Connector	0.44		11000	F	98%	0%	1%	0%	1%	0%	C	0.088	F	0.513	12000	F
Bus		To: North Main Street																
58	East Atlantic Street	From: City of Emporia	0.25		4100	F	87%	1%	1%	0%	11%	0%	F	0.1	F	0.548	4500	F
Bus		To: Reese St																
58	East Atlantic Street	From: City of Emporia	1.20		1900	F	87%	1%	1%	0%	11%	0%	C	0.100	F	0.595	2100	F
58		To: US 58 East Intersection																
North		From: SCL Emporia																
95		City of Emporia (Maint: 40)	1.05		19000	F	78%	1%	1%	1%	19%	0%	F	0.069	F		16000	F
		Combined Traffic Estimates for 2 Parallel Roadways on this Route:	38000			F	79%	1%	1%	1%	18%	0%	F	NA			32000	F
North		To: US 58																
95		City of Emporia (Maint: 40)	0.62		14000	F	78%	1%	1%	1%	19%	0%	F	0.069	F		12000	F
		Combined Traffic Estimates for 2 Parallel Roadways on this Route:	27000			F	80%	1%	1%	1%	17%	0%	F	0.063	F	0.503	25000	F
South		To: NCL Emporia																
95		From: SCL Emporia																
		City of Emporia (Maint: 40)	1.24		19000	F	80%	1%	1%	1%	17%	0%	F	0.075	F		16000	F
		Combined Traffic Estimates for 2 Parallel Roadways on this Route:	38000			F	79%	1%	1%	1%	18%	0%	F	NA			32000	F
South		To: US 58																
95		From: City of Emporia (Maint: 40)	0.35		12000	F	83%	1%	1%	1%	15%	0%	F	0.075	F		12000	F
		Combined Traffic Estimates for 2 Parallel Roadways on this Route:	27000			F	80%	1%	1%	1%	17%	0%	F	0.063	F	0.503	25000	F
South		To: NCL Emporia																
95																		

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							2Axle	3+Axle	1Trail	2Trail						
301 South Main St	City of Emporia	0.45	6100	F	94%	1%	1%	1%	3%	0%	C	0.088	F	0.517	6700	F
301 South Main St	City of Emporia	0.24	8800	F	94%	1%	1%	1%	3%	0%	F	0.087	F	0.573	9600	F
301 South Main St	City of Emporia	0.36	10000	F	94%	1%	1%	1%	3%	0%	F	0.087	F	0.61	11000	F
301 South Main St	City of Emporia	0.49	15000	F	97%	1%	1%	0%	1%	0%	C	0.087	F	0.549	17000	F
301 South Main St	City of Emporia	0.20	14000	F	97%	1%	1%	0%	1%	0%	F	0.084	F	0.539	15000	F
301 North Main St	City of Emporia	0.74	9500	F	97%	1%	1%	0%	1%	0%	F	0.090	F	0.588	10000	F
301 North Main St	City of Emporia	0.34	8000	F	96%	0%	1%	1%	2%	0%	F	0.091	F	0.647	8700	F
301 North Main St	City of Emporia	0.16	8700	F	96%	0%	1%	1%	2%	0%	F	0.104	F	0.644	9500	F

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Route	Length	AADT	QA	4Tire	Bus	Truck				QC	K Factor	Dir Factor	AAWDT	QW	Year	
						2Axle	3+Axle	1Trail	2Trail							
City of Emporia																
(F131)	1.06	NA				From: US 58 C3US 58					NA			NA		
						To: Dead End										
(F963)	0.04	NA				From: C3US 58					NA			NA		
						To: Dead End										
(F964)	0.07	NA				From: US 58 C3US 58					NA			NA		
						To: Dead End										
(F965)	0.31	NA				From: REESE ST					NA			NA		
						To: Dead End										
(1) Brink Rd	0.16	2400	F	99%	0%	1%	0%	0%	0%	F	0.097	F	0.720	2600	F	2005
						From: JB-40-109 SCL Emporia										
						To: US 301										
(2) Purdy Rd	0.49	2200	F	95%	1%	1%	0%	3%	0%	C	0.097	F	0.540	2400	F	2005
						From: West Atlantic St										
						To: Satterfield Dr										
(2) Purdy Rd	0.14	1100	F	95%	1%	1%	0%	3%	0%	F	0.105	F	0.659	1200	F	2005
						To: NCL Emporia										
(5) West End Dr	0.42	340	F	99%	0%	0%	0%	0%	0%	C	0.106	F	0.546	380	F	2005
						From: US 58										
						To: 109-2 Purdy Rd										
(3800) Greenville Ave	0.17	390	F	98%	1%	1%	0%	0%	0%	C	0.124	F	0.564	430	F	2005
						From: South Main St										
						To: Tillar St										
(3801) Low Ground Rd	0.43	2700	F	96%	1%	1%	0%	2%	0%	C	0.096	F	0.529	2900	F	2005
						From: SCL Emporia										
						To: South Main St										
(3801) Laurel St	0.43	890	F	98%	1%	1%	0%	0%	0%	C	0.124	F	0.659	980	F	2005
						To: Temple Ave										
(3802) Brunswick Ave	0.20	3800	F	97%	0%	2%	0%	1%	0%	F	0.094	F	0.515	4100	F	2005
						From: WCL Emporia										
						To: Brunswick Ave Ext.										
(3802) Brunswick Ave	0.66	4400	F	97%	1%	1%	0%	1%	0%	C	0.091	F	0.604	4800	F	2005
						From: South Main St										
(3802) Hicksford Ave	0.46	3000	F	97%	0%	2%	0%	1%	0%	C	0.100	F	0.521	3200	F	2005
						To: Lee St										
(3802) Lee St	0.37	1900	F	99%	0%	1%	0%	0%	0%	C	0.108	F	0.502	2100	F	2005
						From: Hicksford Ave										
						To: Southampton St										
(3804) Valley St	0.14	980	F	98%	0%	1%	0%	0%	0%	F	0.093	F	0.534	1100	F	2005
						From: North Main St										
						To: Halifax St										
(3804) Southampton St	0.29	1100	F	98%	0%	1%	0%	0%	0%	C	0.093	F	0.526	1200	F	2005
						From: Lee St										
(3804) Southampton St	0.18	1800	F	98%	0%	1%	0%	0%	0%	F	0.101	F	0.601	2000	F	2005
						To: East Atlantic St										
(3805) Davis St	1.32	1900	F	94%	2%	2%	1%	2%	0%	C	0.101	F	0.693	2100	F	2005
						From: East Atlantic St										
						To: ECL Emporia										
(3807) Halifax St	0.15	2400	F	98%	0%	1%	0%	0%	0%	F	0.097	F	0.753	2600	F	2005
						From: Southampton St										
						To: East Atlantic St										
(3807) Halifax St	0.34	2700	F	98%	0%	1%	0%	0%	0%	C	0.1	F	0.528	2900	F	2005
						To: Ruffin St										

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						2Axle	3+Axle	1Trail	2Trail							
City of Emporia																
(3807) Halifax St	0.30	1800	F	98%	0%	1%	0%	0%	0%	F	0.095	F	0.524	2000	F	2005
(3807) Halifax St	0.53	1400	F	98%	0%	1%	0%	0%	0%	C	0.091	F	0.579	1500	F	2005
(3808) Reese St	0.12	680	F	98%	1%	1%	0%	0%	0%	C	0.109	F	0.736	740	F	2005
(3808) Reese St	0.83	1800	F	97%	1%	1%	1%	1%	0%	C	0.109	F	0.603	2000	F	2005
(3808) Reese St	0.84	1300	F	85%	1%	1%	4%	10%	0%	C	0.134	F	0.651	1400	F	2005
(3809) Belfield Dr	0.17	2100	F	99%	0%	1%	0%	0%	0%	C	0.093	F	0.618	2300	F	2005
(3810) Weaver Ave	0.21	2300	F	99%	0%	0%	0%	0%	0%	C	0.116	F	0.558	2500	F	2005
(3815) W Atlantic Ave	0.24	780	F	99%	0%	1%	0%	0%	0%	F	0.087	F	0.624	850	F	2005
Baker St	580	F									0.11	F		640	F	2005
Briggs St	1500	F									0.107	F		1600	F	2005
Clay St	2800	F									0.091	F		3000	F	2005
Jefferson St	1400	F									0.094	F		1500	F	2005
Ruffin St	1300	F									0.101	F		1400	F	2005
Temple Ave	520	F									0.129	F		570	F	2005
Tillar St	1700	F									0.107	F		1800	F	2005
West Ave	340	F									0.105	F	0.541	370	F	2005
West End Blvd	880	F									0.097	F		970	F	2005